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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,161	09/09/2003	Jeyhan Karaoguz	14167US02	5714

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EXAMINER
RUSSELL, WANDA Z

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
06/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/658,161	KARAOGUZ ET AL.
	Examiner	**Art Unit**	
	Wanda Z. Russell	2616	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-42</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-42</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>09 September 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892) ✓

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) ✓
    Paper No(s)/Mail Date <u>2/28/2007</u>

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Oath/Declaration

1.   It does not state that the person making the oath or declaration acknowledges

the duty to disclose to the Office all information known to the person to be material to

patentability as defined in 37 CFR 1.56.

CORRECT STATEMENT should read "I acknowledge the duty to disclose information which is

material to patentability of this application in accordance with Title 37, Code of Federal Regulations

Section 1.56."

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

3.   **Claims 1-40** are rejected under 35 U.S.C. 102(b) as being anticipated by

Matthews (U.S. Patent 5,521,910).

For **claim 1**, Matthews teaches a method (Title) for providing enhanced

connectivity (best path, Title) in a multi-band (col. 1, lines 15-16), multi-protocol (col. 1,

lines 13-14) network, the method comprising:

aggregating (combine, col. 9, lines 37-38, and 36-39) messages from a physical

layer (col. 10, line 50) of each communication band (col. 1, line 15) and each

communication channel (port requests, Fig. 2) associated with each of a plurality of

protocols in a single multi-protocol layer of the multi-band, multi-protocol network;

identifying (search for, col. 1, line 18) an optimal communication path (best path,

Title) from among said communication band and said communication channel based on

said single multi-protocol layer (col. 1, lines 18-19); and

establishing (making, col. 1, line 18) a communication session using said

identified optimal communication path (col. 1, lines 18-19).

For **claim 2**, Matthews teaches the method according to claim 1, further

comprising determining (col. 9, lines 39-42) based on said aggregated messages,

whether at least one of said communication channels, said communication bands, and a

combination of said communication channels and said communication bands provides

said optimal communication path (best path, Title) for said communication session (col.

4, lines 30-39).

For **claim 3**, Matthews teaches the method according to claim 2, further

comprising selecting (pursue, col. 4, line 36) at least one of said communication

channels and communication bands, and a combination of said communication

channels and said communication bands for providing said communication session (col.

4, lines 30-39).

For **claim 4**, Matthews teaches the method according to claim 3, further

comprising locating (ARP from mapping, col. 17, line 13) said single multi-protocol layer

(IP, col. 17, line 10) as a sublayer within a data link layer (col. 17, line 14).

For **claim 5**, Matthews teaches the method according to claim 3, further

comprising interfacing (extract, col. 34, line 57) said single multi-protocol layer above a

MAC layer (col. 34, lines 57-58), said MAC layer interfaced (col. 10, line 50, and 48-50)

with said physical layer that is located below said MAC layer.

For **claim 6**, Matthews teaches the method according to claim 4, wherein said

single multi-protocol layer is a super channel (best path, Title) sublayer, said super

channel sublayer being said sublayer of said data link layer (col. 17, line 14).

For **claim 7**, Matthews teaches the method according to claim 1, further

comprising monitoring (check, col. 8, line 8 and 6-10) at least a portion of said

aggregated messages in said single multi-protocol layer by at least one of a network

management process (col. 3, line 23), a bandwidth management process (col. 1, line

15), a load balancing process (discover neighboring nodes, col. 4, lines 26-30), a

session control process (col. 3, line 59) and a QoS management process (col. 3, line

25). (Also see col. 4, lines 39-46).

For **claim 8**, Matthews teaches the method according to claim 7, further

comprising interfacing (operate, col. 3, line 23) at least one of said network

management process, bandwidth management process, load balancing process,

session control process and QoS management process with said super channel (col. 3,

lines 16-25, and summary, col. 2, lines 65-col. 6, line 28).

For **claim 9**, Matthews teaches the method according to claim 8, further

comprising extracting (col. 14, line 66) channel specific data from said single multi-

protocol layer by at least one of said network management process, bandwidth

management process, load balancing process, session control process and QoS

management process (summary, col. 2, lines 65-col. 6, line 28).

For **claim 9**, Matthews teaches the method according to claim 9, further comprising sharing (col. 4, line 48) channel information acquired by each of said network management process, bandwidth management process, load balancing process, session control process and QoS management process among one or more of said network management process, bandwidth management process, load balancing process, session control process and QoS management process (summary, col. 2, lines 65-col. 6, line 28).

For **claims 11-20**, they are machine-readable storage (medium) claims corresponding to method claim 1-10. Therefore they are rejected for the same reason above.

For **claims 21-40**, they are system claims corresponding to method claim 1-10, Therefore they are rejected for the same reason above.

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   **Claims 41-42** are rejected under 35 U.S.C. 102(e) as being anticipated by Voldman et al. (U.S. Patent 7,085,306).

For **claim 41**, Voldman et al. teach a system for providing enhanced connectivity in a multi-band, multi-protocol network, the system comprising:

a physical layer (38-Fig. 2);

a MAC layer above and interfacing with said physical layer (38-Fig. 44); and

multi-protocol layer above and interfacing with said MAC layer (PPP, 50-Fig. 5,

and col. 9, line 15).

For **claim 42**, Voldman et al. teach the system according to claim 41, wherein

said multi-protocol layer and said MAC layer are part of a data link layer (Fig. 2).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Wanda Z. Russell whose telephone number is (571)

270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SEEMA S. RAO   6|2-1|07
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600